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Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 8

Complete if Known

Application Number	10/665,721
Filing Date	09/22/2003
First Named Inventor	Angela M. BELCHER et al.
Group Art Unit	1639
Examiner Name	Teresa D. Wessendorf
Attorney Docket Number	027053-0107

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
TW	C1	4,593,002		DULBECCO	06-1986	
	C2	5,223,409		LADNER et al.	06-1993	
	C3	5,264,563		HUSE	11-1993	
	C4	5,270,170		SCHATZ et al.	12-1993	
	C5	5,316,922		BROWN et al.	05-1994	
	C6	5,403,484		LADNER et al.	04-1995	
	C7	5,510,240		LAM et al.	04-1996	
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/665,721
		Filing Date	09/22/2003
		First Named Inventor	Angela M. BELCHER et al.
		Group Art Unit	1639
		Examiner Name	Teresa D. Wessendorf
Sheet	2	of	8
		Attorney Docket Number	027053-0107

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴ (If known)				
	C39	EP	0 552 267	PEPTIDE THERAPEUTICS LIMITED	07/28/1993		
tdw	C40		02/48701	LIEBER	06/20/2002		
	C41		91/14696	Gilead Sciences, Inc.	10/03/1991		
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
tdw	C43	ALIVISATOS, A. P. et al., Organization of 'nanocrystal molecules' using DNA, Nature, 1996, 382: pp. 609-611.	
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Examiner Signature	T. D. [Signature]	Date Considered	4/14/06
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		Group Art Unit	1639		
		Examiner Name	Teresa D. Wessendorf		
Sheet	3	of	8	Attorney Docket Number	027053-0107

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T.W.	C53	COSTERTON, J. W. et al., Bacterial Biofilms: A common cause of persistent infections, Science, 1999, 284: pp. 1318-1322.	
	C54	DAS, P. et al., Liquid crystal polymorphism in F-actin: Optical microscopic and rotatory dispersion studies, J. Chem. Phys., 1999, 111: pp. 8240-8250.	
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		Group Art Unit	1639
		Examiner Name	Teresa D. Wessendorf
(use as many sheets as necessary)		Attorney Docket Number	027053-0107
Sheet	4	of	8

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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
TW	C67	GLOGAROVA, M., The influence of an external electric field on the structure of chiral sm C* liquid crystal, Mol. Cryst. Liq. Cryst, 1983, 91: pp. 309-325.	
1	C68	GOODBY, J. W. et al., A new molecular ordering in helical liquid crystals, J. Am. Chem. Soc., 1989, 111: pp. 8119-8125.	
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✓	C80	JIN, H.-J., Electrospinning <i>Bombyx mori</i> silk with poly(ethylene oxide), Biomacromolecules, 2002, 3: pp. 1233-1239.	

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tdw	C81	KINGON, A. I. et al., Alternative dielectrics to silicon dioxide for memory and logic devices, Nature, 2000, 406: pp. 1032-1038.	
	C82	LABRENZ, M. et al, Formation of sphalerite (ZnS) deposits in natural biofilms of sulfate-reducing bacteria, Science, 2000, 290: pp. 1744-1747.	
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thw	C95	MATHIAS, J. P., Self-assembly through hydrogen-bonding: peripheral crowding – a new strategy for the preparation of stable supramolecular aggregates based on parallel, connected CA ₃ -M ₃ rosettes, J. Am. Chem. Soc., 1994, 116: pp. 4326-4340.	
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thw	C104	NORRIS, D. J. et al., Size dependence of exciton fine structure in CdSe quantum dots, Phys. Rev. B, 1996, 53: pp. 16347-16354.	
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Sheet	7	of	8

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TD	C109	PEERCY, P. S., The drive to miniaturization, Nature, 2000, 406: pp. 1023-1026.	
	C110	PERCEC, V. et al., Self-organization of supramolecular helical dendrimers into complex electronic materials, Nature, 2002, 419, pp. 384-387, 862.	
	C111	QIN, D. et al., Fabrication of ordered two-dimensional arrays of micro- and nanoparticles using patterned self-assembled monolayers as templates, Adv. Mater., 1999, 11: pp. 1433-1437.	
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	C116	SEEMAN, N. C., DNA in a material world, Nature, 2003, 421: pp. 427-431.	
	C117	SEEMAN, N. C. et al., Emulating biology: Building nanostructures from the bottom up, Proc. Natl. Acad. Sci., 2002, 99: pp. 6451-6455.	
	C118	SHENTON, W. et al., Synthesis of cadmium sulphide superlattices using self-assembled bacterial S-layers, Nature, 1997, 389: pp. 585-587.	
	C119	SONIN, A.A., Freely Suspended Liquid Crystalline Films, (John Wiley & Sons, Ltd, New York, 1998), pp. 25-43.	
	C120	TAYLOR, G., Electrically driven jets, Proc. Roy. Soc. Lond. A., 1969, 313: pp. 453-475.	
	C121	TSORTOS, A. et al., The dual role of fibrinogen as inhibitor and nucleator of calcium phosphate phases: The importance of structure, J. of Colloid and Interface Science, 1996, 177: pp. 257-262.	
	C122	VALLUZZI, R. et al., Silk: molecular organization and control of assembly, Phil. Trans. R. Soc. Lond. B., 2002, 357: pp. 165-167.	

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				Application Number	10/665,721
				Filing Date	09/22/2003
				First Named Inventor	Angela M. BELCHER et al.
				Group Art Unit	1639
				Examiner Name	Teresa D. Wassendorf
Sheet	8	of	8	Attorney Docket Number	027053-0107

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THW	C123	VOLLRATH, F. et al., Liquid crystalline spinning of spider silk, Nature, 2001, 410: pp. 541-548.		
	C124	WHALEY, S. R., "Borrowing Ideas from Nature: Peptide specific to gallium arsenide", Materials Research Soc. Symposium Proceedings, Vol. 599, pp. 189-199 (2000).		
	C125	WALBA, D. M. et al., Detecting molecular chirality by scanning tunneling microscopy, Acc. Chem. Res., 1996, 29: pp. 591-597.		
	C126	WANG, X. et al., Electrospun nanofibrous membranes for highly sensitive optical sensors, Nano Letters, 2002, 2: pp. 1273-1275.		
	C127	WEBER, P. C. et al., Structural origins of high-affinity biotin binding to streptavidin, Science, 1989, 243: pp. 85-88.		
	C128	WELSH, L. C. et al., Evidence for tilted smectic liquid crystalline packing of fd <i>Inovirus</i> from x-ray fiber diffraction, Macromolecules, 1996, 29: pp. 7075-7083.		
	C129	WHITCHURCH, C. B. et al., Extracellular DNA required for bacterial biofilm formation, Science, 2002, 295: p. 1487.		
	C130	WNEK, G. E. et al., Electrospinning of nanofiber fibrinogen structures, Nano Letters, 2003, 3: pp. 213-216.		
	C131	YAO, Z. et al., Carbon nanotube intramolecular junctions, Nature, 1999, 402: pp. 273-276.		
	C132	YU, S. M. et al., Smectic ordering in solutions and films of a rod-like polymer owing to monodispersity of chain length, Nature, 1997, 389: pp. 167-170.		
✓	C133	ZHENG, W. Y. et al., Mesogen orientation within smectic C* side chain liquid crystalline diblock copolymers, Macromolecules, 1998, 31: pp. 2686-2689.		

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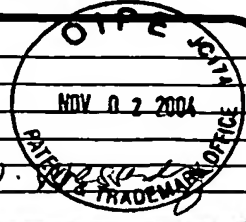
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Sheet	1	of	2



U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	A2	MAO, Chuanbin, et al., "Viral assembly of oriented quantum dot nanowires", PNAS, vol. 100, no. 12, pp. 6946-6951 (June 2003).	
	A3	NAIK, R., et al., "Biomimetic synthesis and patterning of silver nanoparticles", Nature Materials, vol. 1, no. 3, pp. 169-172 (November 2002).	
	A4	LEE, Seung-Wuk, et al., "Ordering of quantum dots using genetically engineered viruses", SCIENCE, vol. 296, pp. 892-895 (May 2002).	
	A5	LEE, J., et al., "Layer-by-layer growth of CDSE-based nanocrystal light-emitting diodes", Journal of Nanoscience and Nanotechnology, vol. 1, no. 1, pp. 569-64 (2001).	
	A6	HAAPARANTA, T., et al., "A combinatorial method for constructing libraries of long peptides displayed by filamentous phage", Molecular Diversity, pp. 39-52 (1995).	
	A7	REISS, Brian D., et al., "Biological Routes to Metal Alloy Ferromagnetic Nanostructures", Nano. Lett. pp. A-F (2004).	

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				Application Number	10/865,721
				Filing Date	09/22/2003
				First Named Inventor	Angela M. Belcher
				Group Art Unit	1651 39
				Examiner Name	Unassigned T.D. Wessendorf
				Attorney Docket Number	027053-0107
Sheet	2	of	2		

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	A8	PCT International Search Report, PCT/US03/29555 (two pages)	

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